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Peter Stockton was Special Assistant to DOE Secretary Bill Richardson from 1999-2001. Mr. Stockton was the Chief investigator for Chairman John Dingell (D-MI) of the House Energy and Commerce Committee from 1972-1995, including during the Committee's investigations of nuclear security failures.

Testimony of Peter D.H. Stockton
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House Democratic Task Force on Homeland Security
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on Inadequate Security at Nuclear Power Plants and Nuclear Weapons Facilities

The Project On Government Oversight (POGO) has spent over two years investigating the adequacy of security at U.S. nuclear weapons facilities, as well as the security at U.S. nuclear power plants. POGO takes no position on nuclear power. The Task Force has asked me to address security vulnerabilities at both nuclear weapons facilities and power plants. There are serious problems with security at these facilities to which the Congress should be paying attention.

Nuclear Power Plants

Nuclear power plant guard forces are expected to protect target sets that, if destroyed or disabled, could lead to a serious radiological release. In addition, the spent fuel pools, if partially drained by a terrorist explosive, could result in a catastrophic radiological fire.

POGO has now interviewed over 150 guards protecting more than half of the total reactors nationwide. According to interviews conducted, we found that security guards at only one out of four nuclear power plants are confident their plant could defeat a terrorist attack. As a result, many guards told us they would simply use their guns to get out of the facility alive. POGO found that security guard morale is very low and that they are under-equipped, undermanned, under-trained, underpaid and uncertain when they can use deadly force. For details on our findings, please see our website, www.pogo.org, for our report "Nuclear Power Plant Security: Voices from Inside the Fences" and our Executive Director's recent testimony before the NRC's Regulatory Information Conference.

The Nuclear Regulatory Commission's (NRC) performance tests of the guard forces are seriously dumbed-down. The number of attackers is unrealistically low, and they have not used weapons that are readily available in gun shops. The real terrorists would have three major advantages – surprise, speed, and violence of action – none of which are factored into these tests. In fact, the tests substantially favor the guard force. Rubber guns and whistles are often used during mock attack tests and drills to simulate guns, with umpires or controllers making the call as to whether a guard or terrorist has been "hit" during an attack. Often, the mock attackers and controllers are secretaries or managers from the utility itself. It is unacceptable that the NRC is still relying on such amateur testing 22 months after 9/11. Extraordinarily, even with months of warning regarding when and how the tests will take place, with plenty of time for the plants to prepare and make themselves ready for the Operational Safeguards Response Evaluation (OSRE), 46% of them still allowed the mock terrorists access to parts of plants where a real act of sabotage could have led, according to the NRC itself, "in many cases to a probable radioactive release."

Furthermore, the NRC has never tested security at a nuclear spent fuel pool. At a number of plants, it only takes 45 seconds to get from outside the double fence to a spent fuel pool. Special Forces advise that they could take an explosive in a rucksack and blow a hole in the bottom or side of the pool. At some plants, pools can be hit from outside the fence or from other buildings with another kind of explosive. Once a sizeable hole is blown in the bottom or side of a spent fuel pool, there is virtually nothing that could be done to stop the cooling water from draining and exposing the fuel rods, causing a catastrophic radiological fire.

Before 9/11 the NRC only required the guard force at nuclear power plants to repel an attack by three terrorists. More than 18 months after 9/11 NRC slightly upgraded the requirement, which is classified. In their announcement, however, they stated, "The Commission believes that the DBT (Design Basis Threat) represents the largest reasonable threat against which a regulated private guard force should be expected to defend under existing law." The NRC seems to have this backwards. NRC appears to be tailoring its requirements to meet the existing capabilities of the plants' private security forces. Instead, NRC should be determining the realistic threat then requiring the utilities to size the protective forces to meet that threat.

Utilities cannot rely on outside responders – FBI, State Police, and local Sheriff SWAT teams – to save the day, simply because a credible attack on one of these plants is over in 3-8 minutes. Tests have shown it generally takes a SWAT team one to two hours to respond –and by then it is all over.

Department of Energy (DOE) Nuclear Weapons Facilities

DOE guard forces are expected to protect against theft of plutonium and highly-enriched uranium, radiological sabotage or dirty bombs, and improvised nuclear devices — an actual nuclear detonation at the facility. Weapons grade material stolen from a DOE facility could be used by a terrorist group to either fabricate a crude nuclear weapon or create a "dirty bomb." In fact, in full-scope mock terrorist attack tests performed by the government at DOE facilities, half the time mock terrorists are successful in breaking in, stealing significant quantities of Special Nuclear Material and leaving the site.

But theft requires that the terrorists get into a facility and back out with the material. What we have found in our investigations is that a suicidal terrorist wouldn't have to work that hard. Instead, a successful suicidal terrorist attack at several of our DOE weapons facilities could result in a sizeable nuclear detonation at the facility itself. A terrorist group does not have to steal nuclear material, create a nuclear device, transport it to the United States, and detonate it in a major city. They could simply gain access to the material at a U.S. nuclear facility - some of which are near large metropolitan areas - and tests have shown can accomplish the same outcome. This type of homemade bomb is called an Improvised Nuclear Device, or IND. Such a detonation can be created by using conventional explosives brought into the facility in a backpack and combined with particular kinds of Special Nuclear Materials stored at these sites. We spend over \$1 billion annually on security at DOE Nuclear Facilities, but it is not spent effectively.

Let me cite one example of a facility that simply can't be protected, but still contains tons of highly-enriched uranium and plutonium – Technical Area - 18 at Los Alamos National Lab. In the Spring of 2000, then-Energy Secretary Bill Richardson ordered that this site be deinventoried, but the bureaucrats simply out-waited him. It is in a canyon, and the bad guys control the high ground. In a mock test several years ago, the "terrorists" stole 240 lbs. of highly-enriched uranium – enough for over 25 nuclear weapons. The "terrorists" had gone to Home Depot and bought a garden cart, attacked the site, and escaped with the uranium. Los Alamos claimed the testers had cheated, because a garden cart isn't on the approved weapons list. In October 2000, there was another mock attack test. The mock terrorists successfully entered a facility, the guard force could not get them out, and they would have had time to create a sizeable nuclear detonation. For more details on these issues, please also see POGO's website for our report "Nuclear Weapons Facilities: Security at Risk" and also our testimony which is being presented as we speak before the House Government Reform Committee.

Congress must understand and conduct regular oversight of NRC and DOE and these Homeland Security vulnerabilities. Congressman Markey has been a leader on these issues for years. I encourage you to contact him to explore legislative remedies. Thank you.